AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method of connecting a first optical fiber having a first MFD and a second optical fiber having a second MFD smaller than the first MFD, by a fusion splicing method, comprising sequentially:

a step of heating a portion including an adjacent end face of the first optical fiber so as to diffuse a dopant; and

a step of connecting the first and the second optical fibers by fusion-splicing, wherein only the first optical fiber is heated before connecting the first and second optical fibers.

2. (Original) The method of connecting optical fibers by fusion splicing according to claim 1, further comprising a step of heating a portion including the fusion-spliced part between the first and the second optical fibers so as to diffuse the dopant contained therein.

3. (Original) The method of connecting optical fibers by fusion splicing according to claim 1, wherein the MFD defined by Petermann I at the adjacent end face of the first optical fiber is enlarged by at least 1 μm by heating the portion including the adjacent end face thereof so as to diffuse the dopant during the heating step before fusion splicing.

4. (Currently amended) A method of manufacturing an optical transmission line, including a first optical fiber having a first MFD and a second optical fiber having a second MFD smaller than the first MFD, the method comprising sequentially:

a step of heating a portion including an adjacent end face of the first optical fiber so as to diffuse a dopant; and

a step of connecting the first and the second optical fibers by fusion-splicing, wherein only the first optical fiber is heated before connecting the first and second optical fibers.

5. (Currently amended) A method of manufacturing an optical transmission line, including a first optical fiber having a first MFD and a second optical fiber having a second MFD smaller than the first MFD, the method comprising sequentially:

a step of heating a portion including an adjacent end face of the first optical fiber so as to diffuse a dopant;

a step of connecting the first and the second optical fibers by fusion-splicing; and

a step of heating a portion including the fusion-spliced part between the first and the second optical fibers so as to diffuse the dopant contained therein, wherein only the first optical fiber is heated before connecting the first and second optical fibers.

6. (Previously presented) The method according to claim 4, wherein the MFD defined by Petermann I at the fusion-spliced part of the first and the second optical fibers is at least 1 μm larger than those at the other parts thereof.

7. (Previously presented) The method according to claim 5, wherein the MFD defined by Petermann I at the fusion-spliced part of the first and the second optical fibers is at least 1 μm larger than those at the other parts thereof.